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REMARKS/ARGUMENTS

Claims 1 and 3-10 are pending in this Application.

Claims 1 and 3-10 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

First, The Examiner has alleged in paragraph no. 2 on page 2 of the outstanding Office Action that the term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention." 35 U.S.C. § 112, second paragraph does not require that the term "substantially" be defined in the claims or that the specification provide a standard. See MPEP § 2173.05(b). 35 U.S.C. § 112, second paragraph only requires that the claims be understood in light of the specification by one of ordinary skill in the art. MPEP § 2173.05(b). Both definitions in the claims and standards in the specification are tools to be used to determine if the claims can be understood in light of the specification by one of ordinary skill in the art. MPEP § 2173.05(b). Thus, the absence of definitions in the claims or standards in the specification is in no way dispositive of whether one of ordinary skill in the art would understand what is claimed in light of the specification.

Further, the Examiner has clearly failed to explain why one of ordinary skill in the art would not understand the scope of the claims. The Examiner has only made allegations without any explanation for making those allegations. MPEP § 706 states that "[t]he goal of examination is to clearly articulate any rejection" (emphasis added). The Examiner has clearly failed to articulate any explanation of his allegations, particularly his allegation that one of ordinary skill in the art would not understand the term "substantially."

The Merriam-Webster Online Dictionary defines "substantial" as "being largely but not wholly that which is specified." The Examiner has completely failed to explain why one of ordinary skill in the art would not understand the feature of the short vertical-

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leg portion extends "over substantially the entire length of the short vertical-leg portion" recited in Applicants' claim 1 or, inserting the definition of substantial, the feature of the short vertical-leg portion extends "over [largely but not wholly] the entire length of the short vertical-leg portion." Thus, Applicants respectfully submit that anyone of skill in the art would understand the scope of this feature to include a short vertical-leg portion that extends over largely but not wholly the entire length of the short vertical-leg portion. Thus, Applicants respectfully submit that one of ordinary skill in the art would understand not only the scope of the feature of the short vertical-leg portion extends "over substantially the entire length of the short vertical-leg portion," but also the entire claim 1 including this feature.

Second, the Examiner has relied upon Exxon Research and Engineering Co. v. United States, 54 USPQ 2d 1519 (Fed. Cl. 2000). The Court of Federal Claims' decision in Exxon Research and Engineering Co. v. United States, 54 USPQ 2d 1519 (Fed. Cl. 2000) has been overturned on appeal by the Appeals Court of the Federal Circuit in Exxon Research and Engineering Co. v. United States, 60 USPQ 2d 1272 (Fed. Cir. 2001). Thus, the Examiner's reliance upon the Court of Federal Claims decision is clearly improper.

Third, the Examiner has alleged that "[t]he term 'substantially' here is vague where applicant argues terms it modifies define over the prior art." Applicants have assumed that the Examiner is referring to MPEP § 2173.05(b) where it states that "[w]hen relative terms are used in claims wherein the improvement over the prior art rests entirely upon size or weight of an element in a combination of elements, the adequacy of the disclosure of a standard is of greater criticality." That is, the closer the prior art and the claimed invention are to each other, the more definite relative terms must be defined.

However, Applicants' claimed invention and the prior art are not close at all. The Examiner has alleged in paragraph no. 9 on page 5 of the outstanding Office Action that "the term 'substantially' is broad enough to cover the leg portions 121 or 421 as seen in

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Figs. 3 and 7" of Katsuki et al. The Examiner has not provided any reason (dictionary definition, case law, or MPEP section) why the feature of the short vertical-leg portion that extends "over substantially the entire length of the short vertical-leg portion" recited in Applicants' claim 1 can be reasonably interpreted to include a short vertical-leg portion over any portion of the length of the short vertical-leg portion. That is, the Examiner can only allege that the prior art and Applicants' claimed invention are close because of the unreasonable interpretation that he has given to the term "substantial." Thus, Applicants respectfully submit that a standard is not required for the term "substantial" because the prior art and Applicants' claimed invention are not close at all, and further submit that one of ordinary skill art would understand the term "substantial" as used in Applicants' claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims under 35 U.S.C. § 112, second paragraph.

Claims 1, 3, 4, and 7-10 were rejected under 35 U.S.C. §102(b) as being anticipated by Katsuki et al. (U.S. Patent No. 5,990,779). The Examiner indicated that claim 2 was also rejected. However, claim 2 has been canceled. Claims 1, 3, 4, and 7-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frielinghaus (U.S. Patent No. 5,168,257) in view of Turner (U.S. Patent No. 3,214,719). Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over Camp (U.S. Patent No. 5,726,623) or Katsuki et al. or Frielinghaus with Turner, and further in view of Nagao et al. (U.S. Patent No. 5,939,972). Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Katsuki et al. or Frielinghaus with Turner, and further in view of Ikeda et al. (U.S. Patent No. 6,147,330). Applicants respectfully traverse the rejections of claims 1 and 3-10.

Claim 1 recites:

"A surface-mountable PTC thermistor element comprising:
a thermistor element body including a top surface and a bottom
surface;
electrodes disposed on the top surface and the bottom surface of

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the thermistor element body;

lower and upper terminals arranged such that each of the electrodes is connected with a respective one of the lower and upper terminals, and each of the lower and upper terminals is extended downward; wherein

said lower terminal includes a junction portion contacting said thermistor element body, a short vertical-leg portion bent vertically in a downward direction at an angle of about 90° relative to the surface of said thermistor element body such that the short vertical-leg portion extends substantially perpendicular to the surface of the thermistor element body over substantially the entire length of the short vertical-leg portion, and a lower-end portion which extends substantially parallel to the junction portion and substantially perpendicular to the short vertical-leg portion;

said short vertical-leg portion is directly connected and extends directly between the junction portion and the lower-end portion;

the junction portion of the lower terminal is mechanically attached to one of the electrodes; and

said vertical-leg portion of the lower terminal is located in the vicinity of the center of the thermistor element body so as to be spaced inwardly from a periphery of the thermistor element body." (emphasis added)

Applicants' claim 1 recites the features of "lower and upper terminals arranged such that each of the electrodes is connected with a respective one of the lower and upper terminals, and each of the lower and upper terminals is extended downward," "a short vertical-leg portion bent vertically in a downward direction at an angle of about 90° relative to the surface of said thermistor element body such that the short vertical-leg portion extends substantially perpendicular to the surface of the thermistor element body over substantially the entire length of the short vertical-leg portion," and "said short vertical-leg portion is directly connected and extends directly between the junction portion and the lower-end portion."

The Examiner has alleged in paragraph no. 9 on page 5 of the outstanding Office Action that "Applicant argues Amgen does not speak to the term 'about' but only 'at least about.'" The Examiner has clearly mischaracterized Applicants' arguments.

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Applicants' argument in the previous Amendment was that the Examiner has failed to provide any reason why the term "about 90°" can reasonably be interpreted to include "about 45° to 70°" as the Examiner has alleged in the paragraph bridging pages 5 and 6 of the outstanding Office Action.

Amgen is clearly directed to determining under what conditions the term "at least about" satisfies 35 U.S.C. § 112, second paragraph. As the Examiner pointed out, the focus of the Court's opinion is centered on "about" and not "at least." However, Amgen is only directed to determining under what conditions that the term "about" satisfies 35 U.S.C. § 112, second paragraph. Once it has been determined that the term "about" satisfies 35 U.S.C. § 112, second paragraph, there is absolutely no indication in Amgen that the term "about" should not be given its broadest reasonable interpretation consistent with the specification as stated in MPEP §2111.

The Examiner has not rejected the claims under 35 U.S.C. § 112, second paragraph, for using the term "about." That is, the Examiner has found that the Applicants' use of the term "about" satisfies 35 U.S.C. § 112, second paragraph. Thus, the Examiner must give the term "about" the broadest reasonable interpretation consistent with the specification. However, there is absolutely no support in Amgen, in Applicants' Specification, or the prior art of record to support the Examiner's allegation that "about 90°" can reasonably be interpreted to include "about 45° to 70°."

Further, as stated in the previous Amendment, the short vertical-leg portion adjacent to the label "Fig. 1" in Fig. 1 of Katsuki et al. extends between an upper and lower portion of element 111, and clearly is not directly connected between a junction portion 111a and a lower end-portion. Thus, Katsuki et al. certainly fails to teach or suggest "said short vertical-leg portion is directly connected and extends directly between the junction portion and the lower-end portion" as recited in Applicants' claim 1.

In addition, the protrusion 421 of Katsuki et al. has an arched or rectangular shape. At best, the arch-shaped or rectangular-shaped protrusion 421 of Katsuki et al. includes only a very small portion of the protrusion 421 which extends substantially

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perpendicular to the thermistor element body 21. Thus, Katsuki et al. clearly fails to teach or suggest "a short vertical-leg portion bent vertically in a downward direction at an angle of about 90° relative to the surface of said thermistor element body such that the short vertical-leg portion extends substantially perpendicular to the surface of the thermistor element body over substantially the entire length of the short vertical-leg portion" as recited in the present claimed invention and in view of the broadest reasonable interpretation consistent with the specification of the terms "substantially" as recited in the present claimed invention.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) as being anticipated by Katsuki et al.

The Examiner has further alleged in the paragraph bridging pages 3 and 4 of the Office Action that Fig. 3 of Frielinghaus teaches the claimed invention except the resistor being a PTC resistor. Applicants submit that the Examiner has mischaracterized the invention of Frielinghaus. Fig. 3 of Frielinghaus fails to, at least, teach or suggest the feature of "lower and upper terminals arranged such that each of the electrodes is connected with a respective one of the lower and upper terminals, and each of the lower and upper terminals is extended downward" as recited in Applicants' claim 1.

The Examiner has relied upon Turner to allegedly teach the use of a PTC resistor. However, Turner fails to teach or suggest the feature of "lower and upper terminals arranged such that each of the electrodes is connected with a respective one of the lower and upper terminals, and each of the lower and upper terminals is extended downward" as recited in Applicants' claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §103(a) as being unpatentable over Frielinghaus in view of Turner.

The Examiner has relied upon Camp, Nagao et al., and Ikeda et al. to allegedly teach or suggest various features recited in the dependent claims. However, none of

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Camp, Nagao et al., and Ikeda et al. teach or suggest the features of "a short vertical-leg portion bent vertically in a downward direction at an angle of about 90° relative to the surface of said thermistor element body such that the short vertical-leg portion extends substantially perpendicular to the surface of the thermistor element body over substantially the entire length of the short vertical-leg portion" as recited in Applicants' claim 1.

Accordingly, Applicants respectfully submit that none of the prior art of record, applied alone or in combination, teaches or suggests the unique combination and arrangement of elements recited in claim 1 of the present application. Claims 3-10 depend upon claim 1 and are therefore allowable for at least the reasons that claim 1 is allowable.

In view of the foregoing remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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